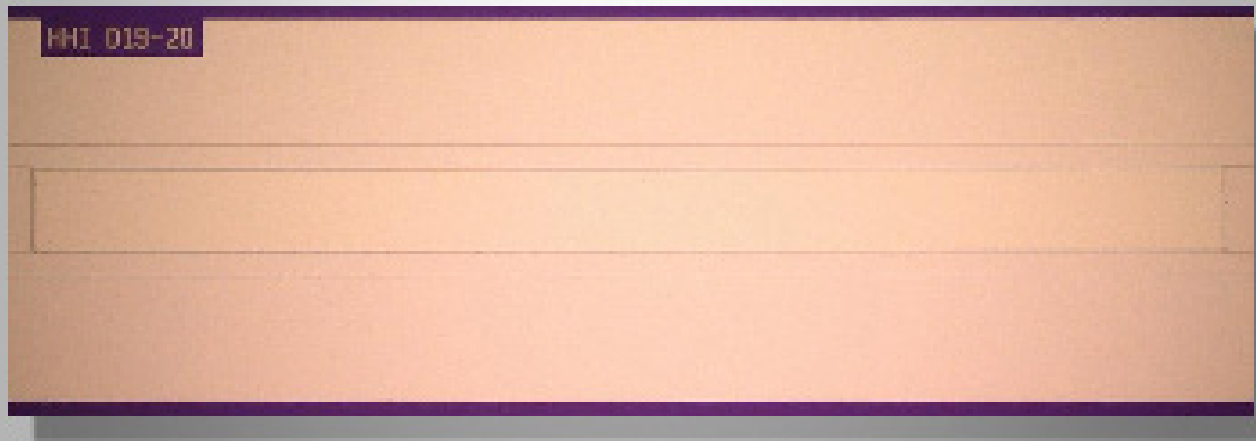


"EYE-SAFE" HIGH POWER BROAD AREA LASER DIODES



AT A GLANCE

- High Power Laser Diodes with 4.9W CW-output power @1550nm



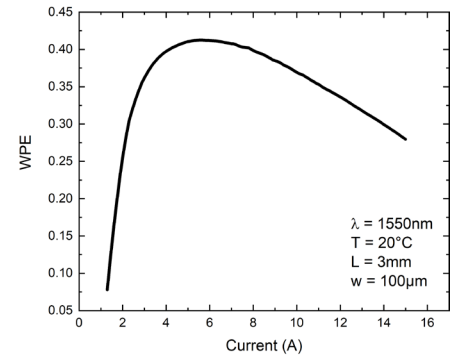
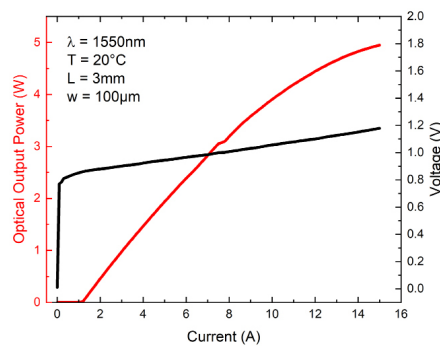
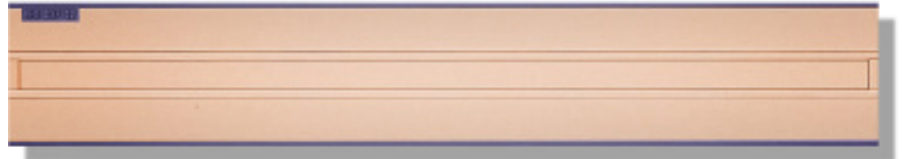
Features

- InP based structures
- High optical output power
- High slope efficiency
- Small fast-axis divergence
- Customized wavelengths
- Customized laser geometry
- Optional wavelength stabilization

Applications

- Medical applications
- Pump source for DPSSL
- Range finding/LIDAR
- Trace gas detection
- Material processing

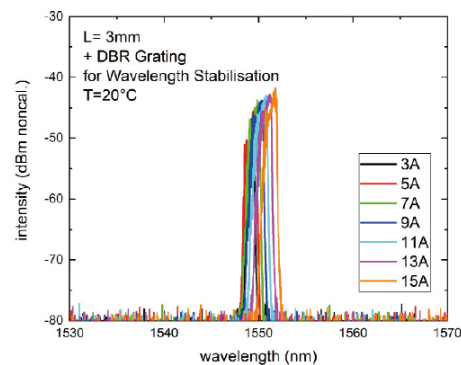
Preliminary data sheet of BA-Laser Diodes



| Parameter | Symbol | Min | Typ | Max | Unit |
|-----------------------------|-------------------------------------|------|-------|------|---------------|
| Center Wavelength | λ_c | | 1550 | | nm |
| Optical Output Power (max.) | P_o | | | 4.9 | W |
| Spectral Width (3dB) | $\Delta\lambda$ | 8 | 10 | 12 | nm |
| Slope Efficiency | η_0 | 0.3 | 0.35 | 0.4 | W/A |
| Wall Plug Efficiency | η | 0.28 | | 0.4 | |
| Threshold Current | I_{th} | 1 | 1.2 | 1.4 | A |
| Series Resistance | R_s | 0.03 | 0.025 | 0.02 | Ω |
| Far-Field Angle (FWHM) | $\Theta_{\perp}/\Theta_{\parallel}$ | | 15x25 | | deg. |
| Emitter Width | w | | 100 | | μm |

All Data mounted p-side down on Heatsink @ 20 °C

Laser Diodes can be customized in wavelength range of 1450nm - 1600nm



Spectra with optional wavelength stabilization



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